

### **REMARKS**

By way of the amendment instructions above, the typographical informalities helpfully noted by the Examiner have been corrected in claims 3 and 7. In addition, in order to provide antecedent basis the abbreviation PTC has been inserted into claim 28 so as to ensure that it is meant to refer to the phase transfer catalyst.

Claims 1, 3-10 and 12-2 remain pending herein following entry of this amendment.

#### **I. Response to 35 USC §103(a) Rejection**

The only issue remaining to be resolved in this application is the Examiner's rejection of all pending claims under 35 USC §103(a) as allegedly "obvious" and hence unpatentable ofrom Barker et al alone or in view of Starks et al, Halpern et al or Judge et al. applicants emphatically suggest that all pending claims are patentably distinguishable over such applied references.

In this regard, the Examiner asserts that Example 14 of Barker et al teaches "...an aldol condensation reaction with carbon 5 and 6 aldehydes..." (Official Action, pg. 3, lines 9-10.) The Examiner then concludes that:

"Barker et al differ from the instant claims in that Barker et al utilize a different carbon 5 aldehyde then (sic) the claimed invention.

One having ordinary skill in the art at the time the invention was made would have found it obvious to substitute the carbon 5 aldehyde of the instant claims for the carbon 5 aldehyde of Barker et al with the expectation of obtaining the

corresponding unsaturated aldehyde by cross aldol condensation reaction.” (Official Action, pg. 3, lines 20-21.)

The Examiner’s position with regard to Barker et al is both factually and legally erroneous.

Factually, according to the applicants’ reading of Example 14 of Barker et al, there is no indication therein with regard to conducting an aldol reaction with mixed 5 and 6 carbon aldehydes as asserted by the Examiner. Instead, Barker discloses that:

“An aldol reaction was carried out...employing 6.1 to 2.9 to 1  
ration of *hexanal* to *2-methyl-pentanal* to *2-ethylbutanal*...”  
(Column 18, lines 19-21)

Each of the aldehydes in Example 14 of Barker et al therefore self-evidently have the **same** – not different – number of carbon atoms. And that the number of carbon atoms in the aldehydes employed in Example 14 of Barker et al is **6** – not 5. Thus, while Barker et al could legitimately be said to disclose an aldol reaction using mixed aldehydes having the **same** number of carbon atoms (i.e., mixed aldehyde isomers), Barker et al most certainly does not disclose or even remotely suggest conducting an aldol reaction using mixed aldehydes having **different** numbers of carbon atoms as defined in the applicants’ claims. Most certainly Barker et al does not disclose or suggest conducting an aldol reaction using a first aldehyde containing 3-5 carbons (especially, wherein the 3-5 carbon aldehyde is propionaldehyde, n-butyraldehyde, isovaleraldehyde, or valeraldehyde) and a second aldehyde containing 6-11 carbons as defined in the pending claims of the subject application.

Legally therefore, the Examiner’s entire premise underlying the rejection advanced in the Official Action is erroneously based on an incorrect view of the Barker et al disclosure. Since the secondary references do not teach or suggest aldol reactions

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using mixed aldehydes having ***different*** numbers of carbon atoms – let alone the specific aldehydes recited in the applicants' claims -- they cannot cure the deficiencies of Barker et al. Withdrawal of the rejection advanced under 35 USC §103(a) is therefore in order.

## **II. Fee Authorization**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

## **III. Conclusion**

Early receipt of the official allowance notice is awaited.

Respectfully submitted,

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